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Religious identity development of adolescents in Christian secondary schools: Effects of school and religious backgrounds of adolescents and their parents.

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Abstract

This study examines religious identity development of pupils at Dutch schools for secondary education (mean age 16.4). With the help of a theoretical conceptualization of 'religious identity development' empirical research is carried out. Main question is whether differences in terms of religious commitment and exploration between pupils of the four participating schools can be explained by religious denominations of pupils and the importance of world view for the pupils' parents. It is concluded that school in general has no significant main effect on religious commitments and explorations of pupils. Religious backgrounds of pupils should be taken into account. Because pupils themselves do indicate that school has influence on the way they look at life, further research is needed in which specific school aspects (like the way pupils evaluate religious education) should also be taken into account.

Context of the research project

The research project 'Religious identity development in adolescence' focuses on pupils of Protestant schools for secondary education in The Netherlands. The religious backgrounds of these pupils are very divers. A lot of research has been done (in The Netherlands) on religious socialisation of children and adolescents. However, only little attention has been paid to the way schools effect or can effect religious identity development. Besides that, most of the research done in the past focuses on specific religious traditions. These studies focus for instance only on children in the school whose parents are member of a certain church (Alma, 1993). As a result, the plurality in the school and the way this effects the religious development of young people, do not get much attention. Because religious plurality nowadays is a fact in many schools, even in religious affiliated schools, it is our contention that it is very important to pay attention to this diversity within (and between) schools and to elaborate on the question in what way this influences religious identity development of adolescents.

In The Netherlands fifty percent of the schools for secondary education is Christian. Schools use very different interpretations of this Christian school identity. The differences between Christian schools with respect to for instance their view on religious education, the (religious) background of their pupils and staff and there location (in a city or more rurally) are enormous. Therefore, the present research can not give a representative view of Christian secondary schools in the Netherlands. An important goal of the research is to gain insight in factors which possibly influence religious identity development. We try to detect, in an exploratory way, aspects which possibly effect religious identity development of pupils. In this article we focus on the possible effects of school, adolescents' religious denomination and importance of world view for the parents of the pupils.

First, we go further into the central concepts of the research on religious identity development. Then we will discuss the design of the present study. Hereby we will focus

on the questionnaire which we used in our research. Special attention will be paid to items on two central concepts: commitment and exploration. These main items of the questionnaire are closely related to the theoretical framework. After we presented the results of our empirical research, we will shortly discuss these results and we will pay attention to the implications for further analyses and research.

Theoretical notions

In order to be able to monitor the religious identity development of pupils and to be able to detect (school) aspects which can influence this religious identity development, an operationalisation of the concept 'religious identity development' is needed. First, we will go further into the concepts of identity and development and then we will briefly touch upon what is meant by 'religiousness'.

Identity and development

Since Erik Erikson's work titled 'Identity, youth and crisis' (Erikson, 1968), identity development has been one of the main issues of the psychology of adolescence. Identity is a very complex concept. Erikson himself has not given a clear definition, which makes it hard to get grip on his work. In our opinion, one of the most important aspects of Erikson's identity theory is that identity is socially founded: Human development is placed in a historical and social context. In Erikson's theory eight phases of development are distinguished. In every phase people are confronted with a kind of conflict. The way an individual solves this conflict effects further development. In adolescence (the fifth phase in Erikson's model), identity development is the most important developmental task. A successful identity development expresses itself in the existence of commitments. In Erikson's work, 'commitments' are the psychosocial bonds which young people make by the end of adolescence. These bonds underline the integration within society. Like in every phase of Erikson's model, there are two possible outcomes of the 'conflict': a positive outcome and a negative outcome. The outcome of the identity conflict is either Identity or Identity diffusion.

Because Erikson used the term 'identity' in many ways, it's very difficult to come to a clear operationalisation of identity on the basis of his work. Many researchers in the field of identity are inspired by the identity status paradigm of Marcia (1966, 1980) who has made further operationalisations of Erikson's theory. Marcia states, with Erikson, that 'commitment' and 'exploration' are very important when it comes to identity development. Exploration refers to a period in which adolescents are searching for sensible alternatives before making commitments (Marcia, 1993). On the basis of these two variables, Marcia has formulated four identity statuses: identity achievement (after exploration commitments have been made), foreclosure (commitment without exploration), moratorium (no commitments have been made, but there is exploration) and diffusion (no commitments, no explorations). Marcia has developed the identity statuses as a methodological instrument, which could make Erikson's theoretical notions on identity development subject of empirical study (Marcia, 1980). Although there are ongoing discussions about the question whether the statuses are too narrowly defined (e.g. Van Hoof, 1999), it is still one of Marcia's most important contributions that he has shown that more nuances can be made when speaking about identity development. Where

Erikson places ego identity versus identity diffusion, Marcia makes clear that there are different ways in which young people come to identity.

In Erikson's theory both essentialistic and constructivistic notions on identity can be found. In a constructivistic view, emphasis is laid on processes and the transaction between object and subject c.q. individual and context. Because an important aim of the present research is to gain insight in (school)effects which possibly influence religious identity development, we take a constructivistic view on identity. Therefore we won't pay attention to essentialistic notions as continuity and sameness. This does not mean that we do not reckon with the human experience of being 'one': "A consolidated sense of self-identity provides a subjective feeling of an inner wholeness and it offers an interpretive context within which questions about the 'meaning', 'purpose', 'fit' and 'direction' of one's life are answered" (Berzonsky, 1990, p. 155-156). The perspective we take on identity does not fail to notice the experienced 'continuity in time and space', but maintains, ontologically speaking, fully constructivistic. With Berzonsky, we describe identity as "a self-constructed cognitive representation of oneself that is used to interpret self-relevant information and to cope with personal problems and life events" (Berzonsky, 1990, p. 156).

In this research project, the main concepts of Marcia's theory will be related to open, dynamic models of development (Breeuwsma, 1993) whereby the extent of commitment and the extent of exploration will be used as descriptors of the actual position towards world view. Explorations and commitments can (and probably will) change during lifetime. The extent and the 'how and when' of these changes vary from person to person.

Bosma (1985) elaborated on Marcia's notions on commitment and exploration. Unlike Marcia, Bosma (1985) does not use a division in identity statuses. Instead he uses (on the bases of factor analyses on the items of his own instrument 'Gids') four scales: two for commitment and two for exploration. The two scales for commitment are: 1. Commitment gives a sense of support, strength and direction. 2. Involvement in and identification with the commitment. The two scales for exploration are: 1. Orientation to other persons in the process of exploration. 2. Attempts to come to a new commitment, to change. Bosma prefers the use of scales instead of statuses, because intra-individual changes can be better monitored. Another difference between Marcia and Bosma is that where Marcia focuses on whether there has been exploration before commitments have been made, Bosma emphasises actual commitments and explorations. With Bosma we describe identity development as "The totality of changes in the content and strength of commitments and the amount of exploration in the achievement and change of these commitments" (Bosma, 1992, p. 99).

Meeus, Iedema, Helsen and Vollebergh (1999) have, for their part, elaborated on Bosma. They used the most robust items of Bosma's Gids and developed a short questionnaire (U-Gids) in order to measure actual commitments and explorations quite easily. Meeus et al. use items on a five point scale which made it possible to measure degrees of commitment and exploration. It is because of the fact that the extent of commitment and exploration can easily be measured with the U-Gids, that we will make use of this instrument. We will come back to this point later on.

Religion / world view

Religiosity can be seen as an extensive term, therefore we use 'world view' here as a synonym. It is important (especially when using an open, dynamic perspective on development) to stress that one's world view can change over time and is not always explicitly present. Therefore, the definition we use in our research runs as follows: "World view is the system, which is always subjected to changes, of implicit and explicit views and feelings of an individual in relation to human life" (see also Andree, 1989; Leeferink, 2000; Miedema, 2003). Hereby, 'views and feelings in relation to human life' can refer to everything people can be occupied with and what can be important to them.

Starting-point is that everyone has a world view. This is stressed by using a broad definition. Because the definition is too long to integrate into a definition of religious identity development, we also make use of a 'stipulative definition' namely: "world view is the way one looks at life". Against the background of Berzonsky's definition of identity and in relation to Bosma's definition of identity development, religious identity development can now be described as: "The total of gradually change in the content and strength of commitments in relation to the way one looks at life and the extent of exploration at reaching and changing these commitments."

Now we have elaborated on the most important theoretical concepts of the research, we will go further into the empirical research which focuses on the religious identity development of adolescents in four Christian schools for secondary education in The Netherlands.

Design of present study

Because the main focus is on the religious identity development of pupils we designed a questionnaire to get more (quantitative) data on for instance their religious backgrounds, their world views and the role these world views play in their lives. In our extensive study we combine the questionnaires with information based on interviews with schoolmanagers, teachers and pupils of the four schools. Here we will only deal with the quantitative part of the research project.

Procedures

The questionnaire we used in this research was based on variables from other projects and our own created variables. The structured questionnaire consists of 57 closed items/questions. Many of the questions are statements. Pupils have to sign in to what degree (on a five point scale) they agree with these statements.

Categories of the questionnaire are (in following order): 'Thinking about life' (questions about the content of world view), 'What do you think of it yourself?' (about the extent of commitment and exploration in relation to world view), 'Activities dealing with the way you look at life' (including questions about prayer, church going, participating in other religious activities), 'parents/educators' (including questions about religious activities of the parents and the extent to which world view/religion is important to them), 'time you were in primary school' (including questions about religious socialisation during childhood), 'World view and Second phase of secondary education' (with questions on how pupils evaluate religious education (as subject and field of education) and to what degree they learn, according to themselves, certain things at school). The questionnaire ends with some 'background questions' about age, gender etc.

The questionnaire was filled in by all pupils in the pre-exam classes of Havo (Higher General Secondary Education) and VWO (pre-university education) of the participating schools (see *Sample*) who were present when the questionnaire was distributed. The questionnaire was filled in during a regular RE-lesson (45-50 minutes) in the second part of the school year.

Sample

Because the character of the present research is both object-theoretical and methodological explorative, there were no strict criteria to select the schools. Ideally, schools might differ reasonably on factors which could be of importance, so that it would be easier to detect these factors. But because there were no clear hypotheses, we could only use some rough criteria. The four schools which participated in the research are all Christian (Protestant) and vary in their location (urban versus rural), pupil population (natives versus non-natives, many pupils versus few pupils with a Christian background) and school size.

School 1, 2 and 3 are situated in the Randstad (urban agglomeration of Western Holland). School 1 is a regional school (1200 pupils) situated in a medium-sized city. School 2 and 3 are situated in two of The Netherlands' main cities. Especially at school 2 (1000 pupils) there are many non-natives. School 3 is with about 640 pupils relatively small (especially in comparison to other city-schools). School 4 (900 pupils) is located in a more rural setting. At this school many pupils come from a Christian background.

The total sample consists of 518 pupils (276 boys, 237 girls, 5 missings) whose ages ranged from fourteen to nineteen years of age (mean age 16.4). Table 1 provides descriptive information for this sample.

Table 1: Description of Pupil Sample by School and School Level (percentages between brackets)

	School 1	School 2	School 3	School 4	Total
Havo	140 (57.6)	58 (58.0)	47 (49.5)	47 (58.8)	292 (56.4)
Vwo	103 (42.2)	42 (42.0)	48 (50.5)	33 (41.1)	226 (43.6)
Total	243	100	95	80	518

Research questions and data analysis

As we made clear, this research project focuses on the actual commitments and explorations of young people in the area of world view and the way different factors influence this. The research questions discussed in this article are as follows:

1. How do pupils in the Second phase of secondary education relate to world views in terms of commitment and exploration?
2. Can eventual differences in terms of commitment and exploration between pupils of the four schools be explained by religious denominations of pupils and/or the importance of world view for the pupils' parents?
3. How do pupils of the four schools experience the relative influence of school, parents, ministers/imams and religious meetings on their world view?

With the help of Manova we searched for significant differences between the four schools and tried to find (interaction-)effects on the commitment- and exploration scales (as dependent variables) and the mentioned (independent)variables. We will now pay extensive attention to the variables which are used in order to answer the first two research questions.

Research variables

Religious commitments and explorations

The questions on commitment and exploration are derived from the U-Gids of Meeus et al. The U-Gids can be used to measure commitments and explorations in different life domains. The stem of the statements is always the same and can be completed by filling in a specific domain. For instance: *The way I look at life* gives me certainty for the future' (commitment) or 'I speak to others about *the way I look at life* regularly' (exploration). Besides the items of the U-Gids, we also used items from the Gids of Bosma which are not used in the U-Gids. These items are presented in the same way as the items from the U-Gids (with a five point scale running from 'not right at all' to 'completely right') to get a more detailed view on the extent of commitments and explorations. In order to assess dimensions of commitment and exploration, principal components factor analyses with varimax rotation were conducted over the items based on the Gids and U-Gids. A minimum eigenvalue of 1.00 and the scree test were used as criteria for extracting factors. On the basis of factor analysis four dimensions were found: exploration focusing on information, exploration focusing on possible changes, commitment as certainty because of ones own way of thinking, commitment as certainty about ones own way of thinking (see table 2). The dimensions show clear correspondence with the four scales of Bosma's Gids (Bosma, 1985).

Table 2.: Exploration and commitment: Scales and items

	Cronbach's alpha (reliability)
Factorloading	
<i>Exploration focusing on information (E1)</i>	.87
I try to get to know a lot about the way I look at life	.80
I often think about the way I look at life	.80
All the time, I try hard to get to know new things about the way I look at life	.84
Regularly, I try to find out what other people think about the way I look at life	.70
I speak to others about the way I look at life regularly	.66
<i>Exploration focusing on possible change (E2)</i>	.82
The way I look at life changes from time to time	.55
I have conflicts with others about the way I look at life	
I try to find a way of looking at life which better fits me than the way I look at life now	.73
I've got the feeling that I have to make choices about the	.56

way I look at life	
I undertake just about everything (searching information, reading, talking to other people etc.) to look at life at a different way	.57
I think of searching an other world view regularly	.78
I often think that an other world view could make my life more interesting	.77
Actually I'm looking for an other world view	.77
<i>Commitment as certainty because of one's own world view (C1)</i>	.85
The way I look at life gives me certainty in life	.72
The way I look at life gives me confidence	.79
The way I look at life gives me certainty for the future	.77
By the way I look at life, I feel certain about myself	.83
Because of the way I look at life, I can look at the future optimistically	.72
<i>Commitment as certainty about one's own world view (C2)</i>	.82
I'm content with the way I look at life	.43
The way I look at life influences my daily life	.58
I could hardly give up the way I look at life	.71
I think it's important to live in accordance with the way I look at life	.71
I feel united with the way I look at life	.69
I am certain about the way I look at life	.53
I stand up for the way I look at life when others do not agree with it	.55
I am prepared to undergo trouble and problems to be able to preserve the way I look at life	.58
The way I look at life is completely my own choice	.52

Religious denomination

One of the questions in the category ‘Activities dealing with the way you look at life’ is: ‘Do you count yourself to a church, a comparable organisation (like a mosque) or movement?’ Table 3 shows the denominations pupils count themselves to (for the group as a whole and separated by school).

Table 3: Description of pupil sample by religious denomination (percentages between brackets)

	School 1	School 2	School 3	School 4	Total
No	124 (51.0)	18 (18.0)	43 (45.3)	30 (37.5)	215(41.5)
Yes, Protestant	67 (27.6)	5 (5.0)	19 (20.0)	47 (58.8)	138(26.6)
Yes, Catholic	34 (14.0)	5 (5.0)	6 (6.3)	2 (2.5)	47 (9.1)
Yes, Islamic	4 (1.6)	60 (60.0)	7 (7.4)	-	71 (13.7)
Yes, Hindu	4 (1.6)	8 (8.0)	16 (16.8)	-	28 (5.4)
Yes, Buddhism	1 (.4)	-	-	-	1 (.2)
Yes, Jewish	-	-	-	-	-
Yes, New Age	-	-	1 (1.1)	1 (1.3)	2 (.4)
Different	9 (3.7)	4 (4.0)	3 (3.2)	-	16 (3.1)

Importance of world view for parents

One of the questions in the category ‘parents/educators’ refers to how important, according to the pupils, world view is for their parents. Because the variables ‘importance of world view for father’ and ‘importance of world view for mother’ are closely related ($r=.78$, $a=.88$), mean scores are computed: ‘importance of world view for parents’ (see table 4). Because the original scale uses five categories (running from ‘not at all important’ to ‘very important’) the computed mean scores are rounded where needed (decimal values higher than .5 are rounded up, decimal values lower than .5 are rounded downward).

Table 4: Description of pupil sample by importance of world view for parents (percentages between brackets)

	School 1	School 2	School 3	School 4	Total
1. Not at all important	11 (4.7)	3 (3.4)	12 (14.0)	3 (3.9)	29 (6.0)
2. Unimportant	18 (7.8)	3 (3.4)	10 (11.6)	4 (5.3)	35 (7.3)
3. Neither important nor unimportant	77 (33.2)	9 (10.3)	18 (20.9)	17 (22.4)	121 (25.2)
4. Important	84 (36.2)	22 (25.3)	29 (30.2)	33 (43.4)	165 (34.3)
5. Very important	42 (18.1)	50 (57.5)	20 (23.3)	19 (25.0)	131 (27.2)

Results

In order to answer our first research question, we compared the mean scores on the four variables (com1,2 en exp1,2). As the means for the total group show (see table 5), the degree of exploration is lower than the degree of commitment. A within-subjects analysis in which the mean commitment (com1 and com2) is compared to the mean exploration (exp1 and exp2) shows that this difference is significant: $F(1)=842,28$, $p<.001$. To examine possible effects for school a multivariate analysis of variance (Manova) was employed with the four variables as dependent factors. School was used as an independent variable. As can be seen in table 5, there are significant differences between the schools for all dependent variables. Commitments as certainty because of one's own world view (com1) are significantly higher at school 3 than at school 1 and 4. Commitments as certainty about one's own world view (com2) are significantly higher at school 2 than at school 1 and 4. Exploration focusing on information (exp1) is significantly high at school 2. On the other hand, exploration focusing on possible change (exp2) is significantly low at school 2 (in comparison to school 1 and 4).

Table 5: Means of commitments and explorations by school

	School 1	School 2	School 3	School 4	Total	F (df=3)	p<
Com 1	3,33 _b	3,38 _{ab}	3,54 _a	3,27 _{bc}	3,37	2,75	0.05
Exp 1	2,71 _b	3,13 _a	2,83 _b	2,60 _b	2,80	6,29	0.001
Com 2	3,36 _c	3,69 _a	3,54 _{ab}	3,44 _{bc}	3,47	7,18	0.001
Exp 2	2,07 _{ab}	1,90 _c	1,93 _{bc}	2,13 _a	2,02	2,92	0.05

Note: Means in the same row that do not share the same subscripts differ significantly for school ($p<0.05$)

In order to find out more about the possible causes of the founded differences between the schools, we will take a closer look at the data to find out whether the differences between schools still exist if the two mentioned background variables are taken into account.

Effects of school and religious denominations of pupils

A Manova with both school and religious denomination as between subjects variables was performed in order to find out whether significant differences between schools on commitments and explorations still exist when 'religious denomination of pupils' is taken into account. Multivariate significant main effects for school ($F(12,1428)=2,02$, $p<0.05$) and religious denomination ($F(24,1908)=1.62$, $p<0.05$) as well as a significant interaction effect ($F(52,1908)=1,38$, $p<0.05$) were found. An univariate significant main effect for school was found for commitment as certainty because of one's own world view (Com1) ($F(3)=4,62$, $p<0.05$): Pupils at school 3 scored significantly higher on Com1 than pupils at school 1 and school 4 (see table 5). Univariate significant main effects for religious denomination were found for commitment 1 ($F(7)=2,50$, $p<0.05$) and exploration 1 ($F(7)=2,76$, $p<0.05$) (see table 6).

Table 6: Means of commitments and explorations by religious denomination with univariate F-tests for main effects of religious denomination (denominations with low frequencies are excluded from the table)

	None	Protestant	Catholic	Islamic	Hindu	Different	Total	F (df=8)	p<
Com1	3,26 _b	3,40 _{ab}	3,35 _{ab}	3,59 _a	3,46 _{ab}	3,53 _{ab}	3,37	2,50	0.05
Exp 1	2,63 _c	2,73 _{bc}	2,74 _{bc}	3,26 _a	3,09 _{ab}	3,01 _{abc}	2,79	2,76	0.05
Com2	3,32	3,48	3,35	3,89	3,60	3,60	3,47	1,82	n.s.
Exp 2	2,04	2,05	2,21	1,77	1,80	2,26	2,02	.690	n.s

Note: Means in the same row that do not share the same subscripts differ significantly for religious denomination ($p<0.05$)

Islamic pupils scored higher on commitment as certainty because of one's own world view (C1) than pupils who do not count themselves to a certain world view. Islamic pupils scored higher on exploration focusing on information (Exp1) than pupils without a certain world view, Protestant and Catholic pupils. Hindu pupils scored higher on exploration 1 than pupils without a certain world view. Univariate no significant interaction effects were found.

Effects of school and importance of world view for parents

A Manova with both 'school' and 'importance of world view for parents' was performed. We found multivariate main effects for both 'importance of world view for parents' ($F(16, 1776)=3,34$, $p<0.001$) and 'school' ($F(12,1329)=2,25$, $p<0.05$) and a significant interaction effect of 'school' and 'importance of world view for parents' ($F(48,1776)=1,59$), $p<0.05$). An univariate main effect of 'school' was found for commitment as certainty because of one's own world view (com 1) ($F(3)= 3,30$, $p<0.05$): Commitment 1 at school 3 is significantly higher than at school 1 and 4, independent of the importance of world view for the parents of the pupils (see table 5). Univariate main effects of importance of world view for parents were found for commitment 1 ($F(4)= 5,60$ $p<0.001$), exploration 1 ($F(4)= 7,60$ $p<0.001$) and commitment 2 ($F(4)= 6,89$ $p<0.001$) (see table 7).

Table 7: Means of commitments and explorations by importance of world view for parents with univariate F-tests for main effects of world view for parents

	Not al all important	unimportant	Neither important nor unimportant	important	Very important	total	F (df=4)	p<
Com 1	3,43 _{ab}	3,04 _c	3,33 _b	3,31 _b	3,58 _a	3,37	5,60	0.001
Exp 1	2,44 _{bc}	2,30 _c	2,60 _{bc}	2,75 _b	3,21 _a	2,80	7,60	0.001
Com 2	3,20 _b	3,29 _b	3,32 _b	3,41 _b	3,77 _a	3,47	6,89	0.001
Exp 2	1,82	2,12	1,99	2,14	1,91	2,02	0,96	n.s.

Note: Means in the same row that do not share the same subscripts differ significantly for importance of world view for parents ($p<0.05$)

Pupils who indicate that world view is unimportant to their parents scored significantly lower on commitment as certainty because of one's own world view (com 1) than pupils

who indicate that world view is not at all important, neither important nor unimportant, important, or very important. Pupils who indicate that world view is very important for their parents scored significantly higher on commitment 1 than pupils who indicate that world view is unimportant, neither important nor unimportant or important for their parents. Pupils who indicate that world view is very important for their parents scored significantly higher on exploration focusing on information (exp 1) than pupils who indicate that world view is not at all important, unimportant, neither important nor unimportant or important for their parents. Pupils who indicate that world view is important to their parents scored significantly higher on exploration 1 than pupils who indicate that world view is unimportant to their parents.

Pupils who indicate that world view is very important for their parents scored significantly higher on commitment as certainty about one's own world view (com 2) than pupils for whose parents world view is not at all important, unimportant, neither important nor unimportant or important.

A significant univariate interaction effect between school and importance of world view for parents was found for exploration 2 ($F(12)= 2,95$, $p<0.05$). Post hoc analyses gave more information on this significant interaction effect: Whereas at school 1 and 4 pupils scored higher on exploration 2 when world view is important to their parents, pupils at school 2 for whose parents world view is important scored significantly lower on exploration 2 in comparison to pupils who indicate that world view is 'not at all important' or 'neither important nor unimportant' for their parents.

Degree of influence

Now we have considered some influences of school and background variables on commitments and explorations, we will shortly pay attention to the third research question about how the pupils themselves experience the degree of influence of different people and/or institutions on the way they look at life. Table 8 shows that pupils of the four schools differ significantly in relation to the extent to which they attribute influence to the different persons/institutions.

Table 8: Mean scores of influence (1-5) of parents, religious meetings, school and minister/imam on the way pupils look at life (according to the pupils)

	School 1	School 2	School 3	School 4	Totaal	F (df=3)	p<
- Influence of parents	4.00 _{ab}	4.19 _a	3.71 _c	3.81 _{bc}	3.95	6.501	<.0001
- Influence of religious meetings	2.10 _c	3.44 _a	2.45 _b	2.44 _b	2.47	30.482	<0.001
- Influence of school	2.93 _a	2.76 _{ab}	2.57 _b	2.92 _a	2.83	3.841	<0.001
- Influence of minister, imam etc.	1.90 _b	3.20 _a	2.16 _b	2.15 _b	2.24	31.134	<0.001

Note: Means in the same row that do not share the same subscripts differ significantly for school ($p<0.05$)

When we range the factors from strongest influence to weakest influence, we can conclude from table 8 that for school 1, 3 and 4 the order is: parents, school, religious meetings, minister/imam etc. For school 2 this order is different: parents, religious meetings, minister/imam etc., school. The founded differences should quite likely be related to the religious denominations of the pupils, for in comparison to school 1, 3 and 4, there are a lot of Islamic pupils at school 2 (see table 3). In the discussion we will now go further into the founded results.

Discussion and conclusion

The present study examined differences between commitments and explorations in relation to world view of pupils of four Dutch Christian schools for secondary education. These differences were compared with differences between the pupils in relation to their world view and the importance of world view for their parents. We found that the pupils scored significantly higher on the scales for commitment than on the scales for exploration. Especially the exploration focusing on possible change (exp2) is low. These results correspond to the general pattern Bosma (1985) found in his data on commitment and exploration: Mean commitments are higher than mean explorations. However, Bosma also found that variation in the group means (two scales for commitment and two scales for exploration) is related to age, sex and area (domain). For further interpretations and (theoretical) explanations of our results further study is therefore needed.

Concerning the second research question we found significant effects for school on commitments and exploration, but the school effects for exploration 1, exploration 2 and commitment 2 were not significant when the mentioned variables were taken into account. At first sight we found that school 2 is characterised by high exploration focusing on information (exp1), high commitment as certainty because of one's own world view (com2) and low explorations focusing on possible change (exp2). This characterization, however, can be explained by the fact that many pupils at school 2 are Islamic and that world view is important to most of their parents.

A main effect for school was still found for 'commitment as certainty because of one's own world view' (com1) when 'world view of pupils' and 'importance of world view for parents' were taken into account. Pupils at school 3 scored significantly higher on this scales in comparison to the pupils at school 1 and school 4. It is worthwhile to try to find explanations for this significant high mean on 'commitment as certainty because of one's own world view' at school 3. We have to take in mind here that not all of the possible factors of influence necessary come up in the questionnaire. Especially from a dynamic perspective, it is important to take the broader social world of the pupils into account. The 'fit' between both primary school and secondary school with the home situation of the pupils might be such a possible factor of influence when it comes to 'certainty because of one's own world view'. Supplementary analyses indicate an effect of pupils' primary school: Pupils who attended a primary school other than Protestant, Catholic or Public school (not favouring a particular world view) scored significantly higher on commitment 1 than pupils who attended a Protestant school ($F(3)=3,06$, $p<0.05$). Comparatively speaking many pupils of school 3 attended a primary school other than Protestant, Catholic or Public school (12,6 percent and only 2,1 percent of the pupils at school 1 and zero percent of the pupils at school 4). Of the pupils of school 3 who attended an 'other primary school' many pupils went to a Hindu school. These

pupils probably have experienced a good fit between their home situation and primary school, which might have given them higher certainty because of their own world view (com1). It seems worthwhile to elaborate on this in further study.

From the fact that when background variables are taken into account, most of the significant differences between the schools (with respect to commitment and exploration) disappear, we conclude that school in itself has, at least in our research population, no significant main effect on the explorations and commitments in relation to world view. There is a main effect of school for commitment as certainty because of one's own world view (com1), but there are good reasons to suppose that this is not a pure school effect. Therefore, we have to conclude that the idea which is expressed both explicitly and implicitly in (political) discussions and research (e.g. Stoffels and Dekker, 1987) that secondary schools have no influence on the religious identity development of pupils can not be rejected on the basis of our results. This does not mean, however, that secondary schools have no function at all when it comes to religious education. In this study we did not look closer at the different aspects of school like for example how pupils evaluate religious education and what pupils indicate to learn at school in relation to world views. Besides that, the pupils themselves indicate that 'school' has a certain influence. The mean score for school as a factor of influence on how pupils look at life is 2.83 (see table 8). In further research attention should be given to the very content of these influences.

We did find certain interaction effects between school and importance of world view for parents. To give a good interpretation of these interaction effects, further research is necessary. We suppose that in respect to the founded significant interaction effect between school and importance of world view for parents (for exp2), there is a relation with the religious denomination of the parents. Many pupils at school 2 come from an Islamic background. Our hypothesis is that pupils with Islamic parents for whom world view/religion is very important, have less explorations focusing on possible change (exp2) than pupils with non-Islamic parents for whom world view/religion is also very important. This should be tested further. Hereby we should also take into account that (Islamic) pupils at school 2 experience a significant higher influence of their parents than pupils at school 3 or 4 (table 8).

The present research proves that pupil populations on Dutch Christian schools for secondary education differ strongly. Pupils differ in their religious commitments and explorations. We found that these differences can be explained by the world view adopted by the pupils themselves and the importance of world view for their parents. The 'self-evaluations' in which the pupils indicate the influence of parents, school and religious meetings on their world view correspond with our conclusion that parents are very important. These conclusions are in accord with other research findings (e.g. Andree, 1983; Stoffels and Dekker, 1987; Jongsma-Tieleman, 1991; Alma, 1993). Therefore, one important implication of the present research is that teachers who want to gain better insight into the religious identity developments of their pupils should not fail to take notice of the religious backgrounds of the pupils and the pupils' parents.

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